

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/802,716 03/08/2001 Hussein Farouk Salama 2705-161 7874 20575 7590 11/02/2005 EXAMINER MARGER JOHNSON & MCCOLLOM, P.C. NEURAUTER, GEORGE C 210 SW MORRISON STREET, SUITE 400 PORTLAND, OR 97204 ART UNIT PAPER NUMBER 2143

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
		09/802,716	SALAMA, HUSSEIN FAROUK
Office Action Summary		Examiner	Art Unit
		George C. Neurauter, Jr.	2143
	The MAILING DATE of this communication		the correspondence address
	for Reply		
WH - Ex aft - If t - Fa An	HORTENED STATUTORY PERIOD FOR RE ICHEVER IS LONGER, FROM THE MAILING tensions of time may be available under the provisions of 37 CFF or SIX (6) MONTHS from the mailing date of this communication. NO period for reply is specified above, the maximum statutory per illure to reply within the set or extended period for reply will, by stroy reply received by the Office later than three months after the m rned patent term adjustment. See 37 CFR 1.704(b).	B DATE OF THIS COMMUNICA R 1.136(a). In no event, however, may a reply indo will apply and will expire SIX (6) MONTH: atute, cause the application to become ABAN	TION. y be timely filed  S from the mailing date of this communication. DONED (35 U.S.C. § 133).
Status			
1)[>	Responsive to communication(s) filed on 2:	5 August 2005.	•
,		This action is non-final.	
3)	<u> </u>		s, prosecution as to the merits is
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Dispos	ition of Claims		
-	4) Claim(s) <u>1-14</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.		
٠,١			
5)  Claim(s) is/are allowed. 6)  Claim(s) <u>1-14</u> is/are rejected.			
	Claim(s) are subject to restriction an	d/or election requirement.	
Applica	ation Papers		
9)[	The specification is objected to by the Exam	niner.	•
	The drawing(s) filed on is/are: a)☐ a		the Examiner.
	Applicant may not request that any objection to	the drawing(s) be held in abeyance	. See 37 CFR 1.85(a).
	Replacement drawing sheet(s) including the cor	rection is required if the drawing(s)	is objected to. See 37 CFR 1.121(d).
11)	The oath or declaration is objected to by the	Examiner. Note the attached C	Office Action or form PTO-152.
Priority	under 35 U.S.C. § 119		
12) <u> </u>	Acknowledgment is made of a claim for fore	eign priority under 35 U.S.C. § 1	19(a)-(d) or (f).
a	a) ☐ All b) ☐ Some * c) ☐ None of:		
	1. Certified copies of the priority docum	ents have been received.	
	2. Certified copies of the priority docum	ents have been received in App	lication No
	3. Copies of the certified copies of the p	priority documents have been re	ceived in this National Stage
•	application from the International Bur	eau (PCT Rule 17.2(a)).	
*	See the attached detailed Office action for a	list of the certified copies not re-	ceived.
•		•	
	•		
Attachme		_	
	tice of References Cited (PTO-892)		nmary (PTO-413) Mail Date
	tice of Draftsperson's Patent Drawing Review (PTO-948)		rmal Patent Application (PTO-152)

Art Unit: 2143

#### DETAILED ACTION

Claims 1-14 are currently presented and have been examined.

## Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 August 2005 has been entered.

### Response to Arguments

Applicant's arguments filed 25 August 2005 have been fully considered but they are not persuasive.

The Applicant argues that MeLampy does not teach or suggest any type of VPN structure including the "TRIB" as disclosed in MeLampy. The Applicant further argues the use of MPLS has nothing to do with VPNs within the embodiments of MeLampy. The Applicant also argues that the TRIBs as disclosed in MeLampy are associated with an external peer and not with a VPN. The Applicant submits that the amended claims show the specific association of one TRIB with one VPN and one gateway.

MeLampy discloses:

Application/Control Number: 09/802,716
Art Unit: 2143

"By using intelligent devices on both sides of a network domain, it is possible to allocate a temporary address to route a packet through a network and restore the original address on the far side of the network when the packet leaves the network.

This is the basis for many current virtual private network (VPN) products and is understood in the art." (paragraph 0010)

"One of the best uses of MPLS is to create a VPN or virtual leased lines (VLL). The MPLS tags can effectively encapsulate the routing of data packets through a network." (paragraph 0011)

"MPLS tags and paths can provide override forwarding for IP packets based on a set of rules that is tied to the IP address portion used for routing, such as, for example, a forward equivalence class (FEC)." (paragraph 0012)

"The use of TRIP in accordance with the preferred embodiment of the invention addresses these mentioned shortcomings of TRIP. In fact, the preferred embodiment of the invention utilizes a form of TRIP that advertises the availability of network routes for ranges including E. 164 style numbering, Internet style addresses of endpoints (URI), and traditional telephone addresses (SIP and non-SIP). As mentioned herein below, best routes to endpoints are selected based upon cost, time of day, and quality of service. In addition, routing by to-from (i.e., origination-destination) pairs and routing by

Art Unit: 2143

requested carrier are provided. The preferred embodiment of the invention also provides the ability to set a future date at which time a policy is advertised or withdrawn." (paragraph 0069)

"For a session router to route SIP invitations to a correct location, a telephone routing information base (TRIB) is established at each forwarding point, or, in accordance with the preferred embodiment of the invention, at each session router.

The TRIB contains a set of policies that are examined upon receipt of a SIP invitation to select a set of potential rules."

(paragraph 0070)

"The carrier data object 302 is a configured entity used to organize and manage relationships with upstream and downstream networks...A SDP/firewall/MPLS 314 field contains SDP formatting instructions for use at either network boundaries or for originating sources." (paragraph 0072)

"A configuration of specifics for the carrier can be established on an SR basis....Specifically, the carrier data object 302 (FIGS. 3A and 3B) exists if the SR is to generate a CIC or provide special MPLS capabilities associated with the carrier." (paragraph 0091)

"The TRIP LS 634 then begins initializing specific TRIBs.

Each of the TRIBs contains temporary data that is frequently

Art Unit: 2143

modified. A mechanism to store these databases, which have dynamic properties, could be an in-memory doubly linked list, an indexed sequential access method (ISAM) database, or any other mechanism that would provide rapid access and provide for each insertion and deletion...When initialization is complete, a TRIB exists for each external adjacent router, a TRIB exists for each internal adjacent router, an output TRIB exists, and a local TRIB exists, all of which are empty and ready for entries."

"Oval 856 represents the Adj-TRIB-In (external), which is the set of route advertisements received from external TRIP peers. It should be noted that there is preferably one Adj-TRIB-In (external) 856 for each external peer." (paragraph 0131)

"In accordance with the preferred embodiment of the invention, TRIP has been enhanced by adding a number of attributes to the routes, including from address, carrier, day of week, time of day, cost, and QoS. The application of these attributes to session invitations is preferably done at run-time since it involves matching the attributes of a session invitation to the route attributes. All distinct routes (i.e., from address, to address, and next hop server) are retained in the TRIB (instead of applying a preference value to the routes and selecting only those routes with the highest degree of

Art Unit: 2143

preference). Essentially, the degree of preference for all
routes is the same." (paragraph 0133)

"In the present example, there are five TRIBs, each of which is described relative to SR 2000. An adjacent TRIB input (Adj-TRIB-In) is split into external adjacent TRIB Input (Ext-Adj-TRIB-In) and internal adjacent TRIB input (Int-Adj-TRIB-In). This allows for further granularity in discussing how various policy inputs are processed. There is one Ext-Adj-TRIB-In per external (to the ITAD) peer, so the SR will have one Ext-Adj-TRIB-In. Likewise, there is also one Int-Adj-TRIB-In per internal SR, so the example starts with one Int-Adj-TRIB-In. There is one external TRIB (Ext-TRIB) containing the processed external and local route information for advertisement to internal peers, one local-TRIB containing the routing information used by this router to make routing decisions, and one adjacent TRIB output (Adj-TRIB-Out) containing routes processed for advertisement to external peers." (paragraph 0162)

As is will known in the art and as disclosed within MeLampy, a virtual private network allows two separate nodes on different networks to communicate as though they are connected within the same network and MPLS is a specific advantageous embodiment of a virtual private network. As specifically disclosed in MeLampy, the MPLS field in a carrier data object

Art Unit: 2143

and registration information or "route advertisements" as disclosed in MeLampy is used to create TRIBs as disclosed in MeLampy. Since the claims contain a nominal recitation of an association between a TRIB and a VPN, between a TRIB and a gateway, and between a gateway and a VPN, the use of an MPLS label field to create a TRIB creates a distinct association between the information contained in the MPLS field and the TRIB that is created and stored at the location server as disclosed in MeLampy is based on this information. Further, by the reception of route advertisements by the location server from gateways external to the location server and the addition of information distributed via the TRIP protocol which includes MPLS information within a TRIB, each gateway is assigned a VPN based on the received registration information. Therefore, MeLampy does disclose such an association and anticipates the limitations of the claim.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

<sup>(</sup>e) the invention was described in (1) an application for patent, published under section 122(, by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the

Art Unit: 2143

invention by the applicant for patent, except that an international application filed under the treaty defined in section 351( shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application Publication 2002/0114282 A1 to MeLampy et al.

Regarding claim 1, MeLampy discloses a method for providing virtual private networks (paragraph 0011-0012) for voice over data network applications, the method comprising:

creating at least two routing information database (referred to throughout the reference as "telephony routing information base" or "TRIB") on a location server; (paragraphs 0109, 0130, and 0162)

defining a voice virtual private network such that each virtual private network corresponds to one of the routing information databases; (paragraphs 0071-0072, specifically paragraph 0072, last sentence)

receiving registration information from at least two gateways in communication with the location server; (paragraphs 0077, 0105, and 0131-0132) and

associating each gateway with one of the virtual private networks. (paragraphs 0070, 0072, 0109, and 0131-0132)

Art Unit: 2143

Regarding claim 2, MeLampy discloses the method of claim 1, wherein the method further comprises assigning an identifier ("carrier name") for each virtual private network. (paragraph 0072, specifically the last sentence; paragraph 0091, specifically the last sentence)

Regarding claim 3, MeLampy discloses the method of claim 1, wherein the method further comprises communicating the registration information to other location servers in the same network telephony administrative domain. (paragraphs 0067, 0105 and 0125)

Regarding claim 4, MeLampy discloses the method of claim 1, wherein the data network uses Internet Protocol. (paragraph 0009)

Regarding claim 5, MeLampy discloses the method of claim 4, wherein the routing information database is a telephony routing over IP routing information base. ("TRIB"; paragraph 0070)

Regarding claim 6, MeLampy discloses the method of claim 1, wherein the method further comprises leaking a global routing information database to a routing information database for a particular virtual private network. (paragraphs 0067, 0071, 0072, and 0114, specifically paragraph 0114)

Regarding claim 7, MeLampy discloses a network device, comprising:

Art Unit: 2143

more than one routing information database; (paragraph 0109)

at least one port operable to receive registration information from gateways in communication with the network device; (paragraphs 0075, 0077, 0105, and 0453) and

an association table ("mechanism to store" the routing information database) operable to associate each routing information base with a different virtual private network and each gateway with a different routing information base.

(paragraphs 0070, 0072, 0109, 0133, and 0162)

Regarding claim 8, MeLampy discloses the network device of claim 7, wherein the device further comprises an interface through which the device communicates with other devices having routing information databases to synchronize information contained in the routing information databases between the devices. (paragraphs 0067, 0075, 0105 and 0125)

Regarding claim 9, MeLampy discloses the network device of claim 7, wherein the device is a server. (paragraph 0105)

Regarding claim 10, MeLampy discloses the network device of claim 7, wherein the device is a router. (paragraph 0105)

Regarding claim 11, MeLampy discloses an article including instructions that, when executed, result in:

Application/Control Number: 09/802,716
Art Unit: 2143

creation of at least two routing information databases on a network device; (paragraph 0109)

association of a different voice virtual private network with each routing information database; (paragraph 0071 and 0072, specifically paragraph 0072, last sentence)

reception of registration information from gateways in communication with the location server; (paragraphs 0077 and 0105) and

association of each gateway with one of the virtual private networks. (paragraphs 0070, 0072, and 0109)

Regarding claim 12, MeLampy discloses the article of claim 10, wherein the article further comprises a downloadable file. (paragraph 0107)

Regarding claim 13, MeLampy discloses the article of claim 10, wherein the article further comprises a processor having the instructions stored in memory. (paragraph 0107)

Regarding claim 14, MeLampy discloses a network device, comprising:

means for providing more than one routing information base; (paragraph 0109)

means for defining a voice virtual private network such that each virtual private network corresponds to one of the

Art Unit: 2143

routing information databases; (paragraph 0071 and 0072, specifically paragraph 0072, last sentence)

means for receiving registration information from gateways in communication with the network device; (paragraphs 0077 and 0105) and

means for associating each gateway with one of the voice virtual private networks. (paragraphs 0070, 0072, and 0109)

#### Conclusion

The following prior art listed in the PTO-892 form included with this Office Action discloses methods, systems, and/or apparatuses similar to those claimed and recited in the specification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is (571) 272-3918. The examiner can normally be reached on Monday through Friday from 9AM to 5:30PM Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2143

Page 13

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gcn

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100